Effectiveness of the NEPA Process

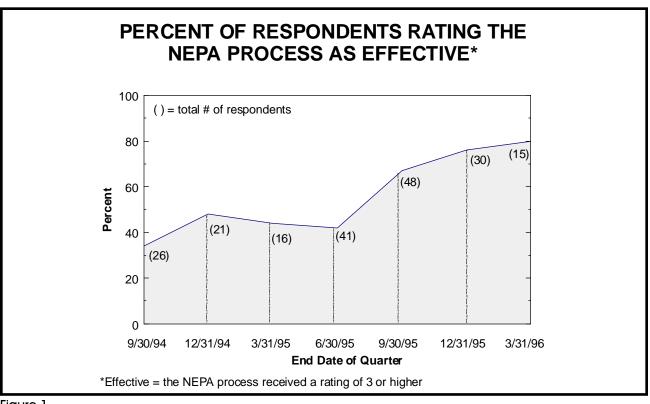


Figure 1

RATINGS

0 = Not effective at all

1 = Not very effective

2 = Somewhat effective

3 = Effective

4 = Very effective

5 = Highly effective

The chart above illustrates an upward trend in the number of respondents who have rated the NEPA process as effective. For purposes of this chart, "effective" means the NEPA process was rated with a 3, 4 or 5 (see adjacent box). The percentage of respondents who consider the NEPA process to be effective is shown from 4th Quarter 1994 to the present and has risen to 80%.

For this quarter, more than half of the respondents gave the NEPA process high ratings of 4 and 5. One commented that NEPA helped in identifying a problem and that the public participation requirements

changed many of the Department's views. The respondent noted that while the NEPA process played a key role in decision making, the environmental factors were not important discriminators.

In another case, a respondent indicated that phone calls made to applicants/grantees to request information helped in planning as well as doing the NEPA analysis. This type of exchange developed a good working relationship between the parties. Another respondent stated that the concerns raised during public involvement were critically important to arriving at agreement on a more environmentally conservative approach.

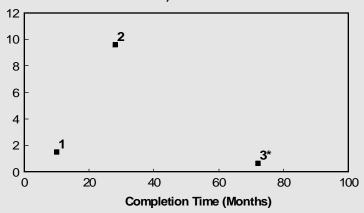
Respondents gave several reasons for low NEPA effectiveness ratings, including that very little public comment was received, and that the proposal was very straightforward and required little thought.

LESSONS LEARNED NEPA - 13

EIS Cost and Completion Times Data

EIS Costs and Completion Times

Total NEPA Cost (\$ million) (Contractor Cost + Federal Staff Cost)



• The completion times for the 3 EISs completed during the 2nd quarter of FY1996 were 10, 28, and 72 months.

Completion Time Facts

• None of the 3 EISs was completed on schedule.

* Federal staff cost only, contractor costs not reported

- The NEPA process was initiated early enough for 1 EIS to avoid being on a critical path; for 2 EISs it was not.
- Cumulatively over the last year, the median completion time for 21 EISs was 28 months.

Cost Facts

- NEPA process costs for the 3 EISs completed in this quarter were \$650,000, \$1.5 million, and \$9.6 million.
- Budget data were reported for 2 EISs; neither was completed within budget.
- Contractor cost data were reported for 2 EISs; these costs were \$9 million for EIS #2 and \$1.3 million for EIS #1.
- Total project costs were reported for 2 EISs for which NEPA process cost represented 1.2% and 1.7% of the total project cost.
- Cumulatively over the last year, the median contractor cost for the preparation of 15 EISs was \$1.3 million.

Erratum:

The total cost to prepare the Safe Retrieval, Transfer and Interim Storage of Hanford Tank Waste EIS was incorrectly reported on page 11 of the Lessons Learned Quarterly Report issued 3/1/96; the correct cost is \$3.5 million.

EISs

Richland Operations Office/ Environmental Management

1= Management of Spent Nuclear Fuel from the K Basins, Hanford Site, Richland, Washington, DOE/EIS-0245, EPA rating: EC-2 (\$1.5 million; 10 months)

Environmental Management

2 = Proposed Nuclear Weapons Nonproliferation Policy Concerning Foreign Research Reactor Spent Nuclear Fuel, DOE/EIS-0218, EPA rating: EC-2 (\$9.6 million; 28 months)

Bonneville Power Administration

3 = Yakima River Basin Fisheries Project, Oregon, DOE/EIS-0169, EPA rating: EC-2 (\$650,000 (contractor costs not reported); 72 months)

ENVIRONMENTAL PROTECTION AGENCY (EPA) RATING DEFINITIONS

Adequacy of the EIS

Category 1 — Adequate
Category 2 — Insufficient Information
Category 3 — Inadequate

Environmental Impact of the Action

LO — Lack of Objections EC — Environmental Concerns

EO — Environmental Objections
EU — Environmentally Unsatisfactory

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EA Cost and Completion Times Data

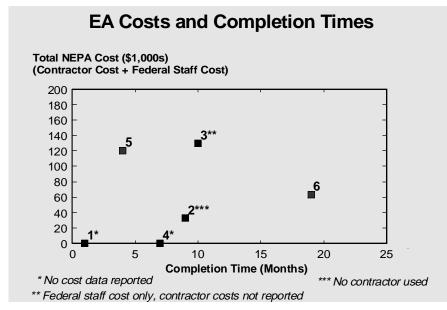


Figure 3

Completion Time Facts

- The median completion time for 6 EAs completed during 2nd quarter FY1996 was 8 months (range: 1 to 19 months).
- 2 out of 5 EAs for which scheduling information was reported were completed on schedule.
- The NEPA process was initiated early enough for all 6 EAs to avoid being on a critical path.
- Cumulatively for the last year, the median completion time for 77 EAs was 16 months.

Cost Facts

- NEPA process cost data were reported for 4 EAs.
- Of the 6 EAs, budget data was reported for 3 EAs, none of which was completed within budget.
- Contractor cost data were reported for 2 EAs; these costs were \$6,670 for EA #5 and \$33,000 for EA #6.
- Total project cost was reported only for EA# 2, of which the NEPA process represented .1%.
- Cumulatively for the last year, the median contractor cost for the preparation of 49 EAs was \$65,000.

EAs

Albuquerque Operations Office/ Environmental Management

1 = TRU Drum Staging Building, LANL, Los Alamos, New Mexico, DOE/EA-0823 (Costs unreported; 1 month)

Chicago Operations Office/

Energy Research

2 = Proposed Construction of Lied Transplant Center, University of Nebraska Medical Center, Omaha, Nebraska, DOE/EA-1143 (\$32,500 Federal cost, no contractor used; 9 months)

Energy Efficiency and Renewable Energy

3 = Bison School District Heating Plant Project, Colorado, DOE/EA-1084 (\$130,000 Federal cost, contractor costs unreported; 10 months)

Oak Ridge Operations Office/ Environmental Management

4 = Management of Spent Nuclear Fuel at the Oak Ridge Reservation, Oak Ridge, Tennessee, DOE/EA-1108 (Costs unreported; 7 months)

Savannah River Operations Office

5 = Off-Site Commercial Cleaning of Lead and Asbestos Contaminated Laundry Generated at the Savannah River Site, DOE/EA-1130 (\$120,000; 4 months)

Southwestern Power Administration

6 = Vegetation Control at VHF Stations, Microwave Stations, Electrical Substations and Pole Yards, Missouri, Oklahoma, Arkansas, DOE/EA-1110 (\$63,000; 19 months)

LESSONS LEARNED NEPA - 15

Trends Analysis

Introduction

In this section we analyze trends for NEPA process cost and time, two key metrics that reflect the Department's progress in improving its NEPA compliance program. The Office of NEPA Policy and Assistance has been tracking and reporting data on these metrics during the past seven quarters, in accordance with the Secretary's NEPA Policy, and intends from time to time to analyze the data and report on the Department's progress. (For example, please refer to Figure 1 on page 13, which suggests significant improvements regarding a different key metric, the effectiveness of the Department's NEPA process.)

In conducting this trends analysis, we have examined various timeframes, including the period since the Secretary's NEPA Policy Statement (i.e., 7/1/94 to present), the last 12 months, and, in a trendline presentation, the last 6 months. Each period is characterized by different average/median results, which the reader should take care to distinguish.

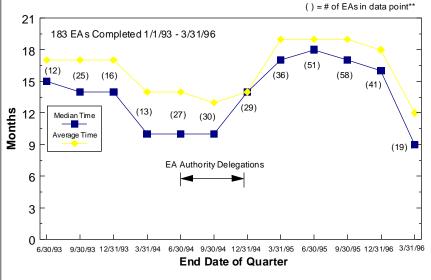
EA Completion Times

Conclusions regarding trends based on these data (Figure 4) should be made cautiously in light of the wide range in completion times, as suggested by the differences between the median and average (Also see Figure 6).

The data suggest that after EA approval authority was delegated to field office managers, median EA completion times increased from about 10 months to about 17 months. After approximately one year, median EA completion times appear to have decreased to about 9 months.

EA Completion Times

6 months moving trendline, revised quarterly*



- Each data point represents EAs completed within the 6 months period ending on the indicated date. This technique tends to smooth out quarterly changes.
- * EAs may be counted in two data points.
- Analysis of the sample of EAs approved in the year after delegation suggests that Field Offices completed the NEPA process for many "old" EAs. Other factors that may have contributed to the completion time increase include: the number of EAs completed increased from about 50 per year for 1993 and 1994 to about 95 for the year following delegation which may have stretched available NEPA expertise and resources available; a "learning curve" period during which several Field Offices reported the need to augment their NEPA staff and refine their EA review and approval procedures; providing enhanced public participation opportunities in accordance with the Secretary's NEPA policy may have lengthened the process in some cases; and, in a few instances, Field Office decision makers found that they needed time to deliberate on controversial decisions that previously would have been made at headquarters.
- Data for EAs <u>initiated</u> after delegation, although incomplete and therefore not presented in

Figure 4

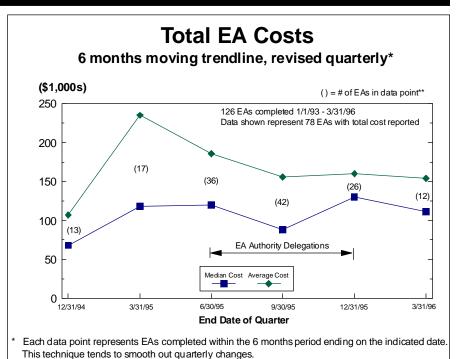
Figure 4, strongly suggest an overall decrease in EA completion times to levels at or below predelegation levels. These data better represent recent DOE performance because they do not include the effects of any backlog of "old" EAs. For example, of the 68 EAs started after 1/1/95, the EA process for about 50% of them has been completed; the median completion time for the 68 EAs will be less than about 9 to 10 months (the median for EAs already completed was 4 months). We will continue to study these "new" EAs and report on the results when appropriate.

• Figure 4 also suggests an apparent decrease in EA preparation times from a median of about 14 months in 1993 to about 10 months in 1994. This decrease may reflect several significant cost and time savings recommendations that the Department began to practice almost immediately after issuance in January 1994 of the Report of the Environmental Assessment Process Improvement Team.

Trends Analysis

EA Costs

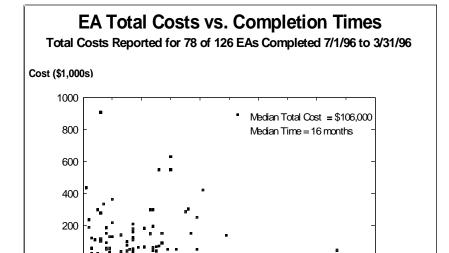
- This figure represents only those completed EAs for which costs have been reported, which constitutes 62% of the EAs completed during the period.
- Large differences between the median and average indicate wide cost variations.
- No reliable EA cost data are available for EAs completed before June 1994.
- The data suggest that delegation did not affect the typical EA cost, which has been nearly constant through this period.



 EA cost variations among different program offices were discussed in the March 1, 1996 edition of the Lessons Learned Quarterly Report.

EAs may be counted in two data points.

Figure 5 We intend to further study and report on cost and time data for programs and field offices.



40

Completion Time (Months)

60

Figure 6

EA Total Costs vs. Completion Times

- Figure 6 illustrates the wide variation in both costs and completion times for EAs.
- These data show that a high proportion of the EAs with relatively long completion times (i.e., greater than 20 months) have relatively high costs (i.e., greater than \$200,000), while the overall correlation between EA cost and time is very weak. For example, nearly one-half of the EAs with long completion times cost less that \$100,000.

LESSONS LEARNED NEPA - 17

80

100

Trends Analysis

EIS Cost vs. Completion Times

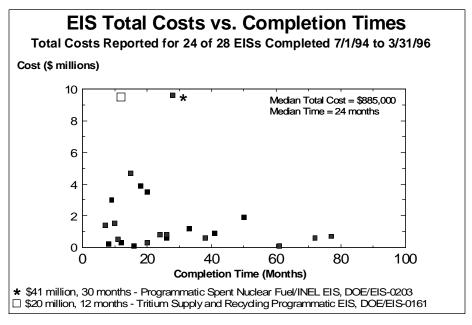


Figure 7

- This figure illustrates that the distribution of EIS costs strongly clusters in the low end of the range; 70% of EISs cost less than \$2 million. EISs rarely cost more than \$5 million.
- EIS completion times vary widely.
 These data do not suggest a correlation between completion times and costs. EISs with the
- longest completion times (greater than 30 months) were among the least costly EISs and none cost more than \$5 million.
- We believe analysis of recent DOE performance regarding EIS costs and completion times requires study of EISs <u>initiated</u> after the issuance of the Secretary's NEPA policy in

June 1994. Of 15 such EISs, five have been completed to date (completion times of 9, 10, 11, 12 and 19 months), which is too small and biased a sample to enable meaningful trend analysis. We intend to continue to study EIS trends and will report the results as sufficient data become available.

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Evaluation Form How are we doing? Does the new format of the Lessons Learned Report make the information easier to understand? Which sections do you consider to be the most helpful? The least helpful? What should be added to the report to make it more useful? Please offer any other suggestions on how we may improve the Lessons Learned Quarterly Report. Your name (optional)

LESSONS LEARNED NEPA - 19

FROM:	 	 Stamp

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